AMENDMENTS TO THE CLAIMS:

Complete Listing of Claims

Claims **1 - 7** (canceled)

Claim **8**. (currently amended) A system for extending a signal path of a host bus comprising:

a first repeater portion connected to a first segment of the host bus;

a second repeater portion connected to a second, non-hierarchical segment of the host bus remote from the first segment of the host bus, where the first and second portions of the repeater are connected by a serial link, wherein at least one of the repeater portions further comprises:

an interface to the first bus segment;

a transaction queue with a data buffer connected to the interface;

a link translation layer connected the transaction queue to translate incoming transactions from the first bus segment into serial streams to be sent over the serial link ~~The system according to claim 5~~, further comprising a transaction decode circuit connected to the interface to the first ~~host~~ bus segment to determine which transactions on the first ~~host~~ bus segment to accept and pass on over the serial link.

Claims **9 -14** (canceled).

Claim **15**. (new) The system according to claim **8**, wherein the serial link is chosen from one of the following: LVDS, Gigabit Ethernet, InfiniBand, IEEE1394, RF Wireless, Infrared Wireless, or any combination of these.

Claim **16**. (new) The system according to claim **8**, wherein the host bus is a PCI bus.

Claim **17**. (new) The system according to claim **15**, wherein the host bus is an LPC (Low Pin Count) bus as defined by Intel 1997.